



MICHIGAN ECONOMIC UPDATE

Office of Revenue and Tax Analysis
Michigan Department of Treasury

<http://www.michigan.gov/treasury>

August 2016 Summary

U.S. Economy: The annual rate of real GDP growth in 2016Q2 was revised up from 1.1 percent to 1.4 percent. New durable goods orders fell 1.3 percent from last August. Consumer sentiment was down 2.1 percentage points from August 2015 and fell 0.2 of a point from a month ago. Retail sales increased 1.9 percent from last August. The Institute for Supply Management (ISM) reported the current expansion has now lasted 87 months. The ISM Production Management Index (PMI) fell 1.6 points from last August. At 49.4, the August 2016 PMI signaled a contracting manufacturing sector following five months of signaling manufacturing sector expansion. The ISM non-manufacturing index (NMI) signaled service sector expansion for the 79th straight month, but was down sharply (6.9 points) from last August. In August 2016, industrial production declined 1.1 percent from the year-ago level. This marked the 12th straight month in which industrial production fell below the year-ago level and the first time it has declined for 12 consecutive months since December 2009. The capacity utilization rate fell 1.2 points from August 2015. The August 2015-August 2016 decline in the utilization rate marked the 18th consecutive y-o-y rate drop. Both housing starts and existing home sales were up slightly from last August with percent increases of 0.9 percent and 0.8 percent, respectively.

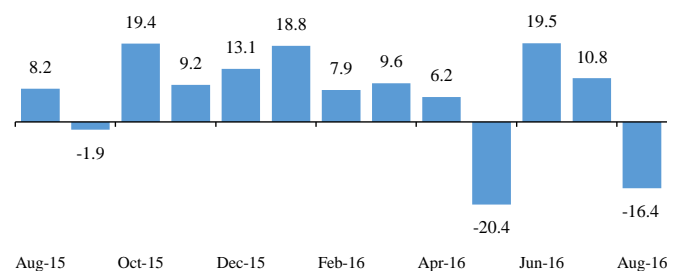
Employment: In August 2016, the Michigan unemployment rate was unchanged from July at 4.5 percent – the State’s lowest unemployment rate since January 2001. The August 2016 Michigan rate was down 0.6 of a percentage point from August 2015. The U.S. rate was unchanged from July at 4.9 percent. Between August 2015 and August 2016, Michigan payroll employment gained a net 75,800 jobs (1.8 percent). Michigan payroll employment in August 2016 fell 16,400 jobs compared to July 2016. U.S. payroll employment was up 2.5 million jobs (1.7 percent) in August 2016 compared to a year ago. National payroll employment was up by 151,000 jobs from July to August.

Auto Industry: In August 2016, U.S. light vehicle sales fell 3.8 percent from last August to an annualized 16.9 million units. Between August 2015 and August 2016, the three-month average of Michigan vehicle production rose 11.2 percent while the three-month U.S. average was up 1.4 percent. Between August 2015 and August 2016, Michigan’s share of U.S. vehicle production fell 0.1 of a percentage point to 18.4 percent.

Inflation: In August 2016, the overall U.S. consumer price index (CPI) rose 1.1 percent from a year ago while the Detroit CPI increased 1.7 percent. The core U.S. CPI (excluding food and energy) was up 2.3 percent from last August. The U.S. producer price index was unchanged from last year. At \$44.72, the August 2016 price of oil per barrel was up \$1.85 (4.3 percent) from August 2015.

Michigan Metro Areas: Compared to a year ago, August 2016 unemployment rates fell in 12 of Michigan’s 17 major labor markets and in 65 of the State’s 83 counties. Household employment rose in 15 of Michigan’s 17 major labor market areas.

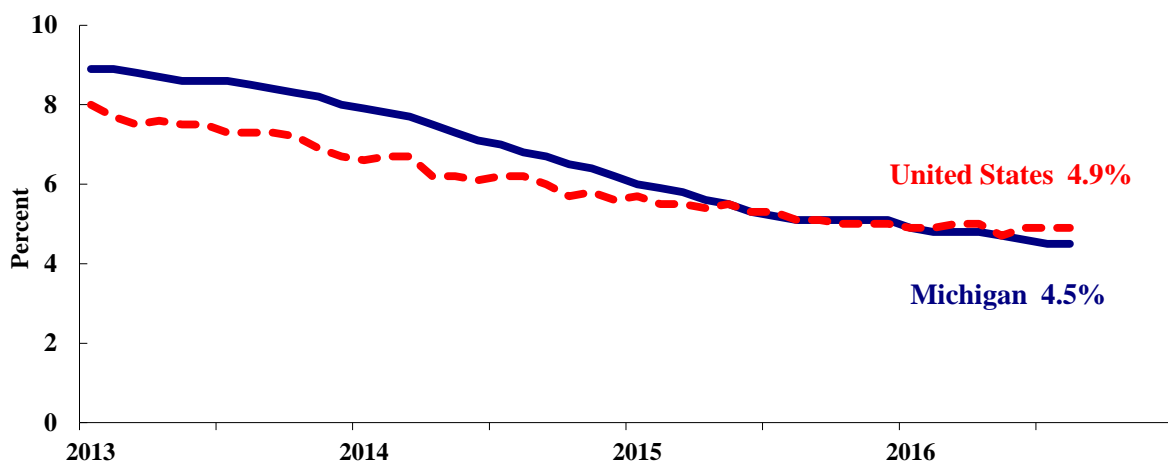
**Michigan Payroll Employment
Down Substantially in August**
(change from previous month, thousands of jobs) ^(a)



Labor Market Statistics

- In August 2016, the Michigan unemployment rate remained unchanged at 4.5 percent. Michigan's unemployment rate is the lowest since January 2001. The national unemployment rate remained unchanged from July to August at 4.9 percent. This is the second month in a row that Michigan's unemployment rate has been 0.4 of a percentage point below the national average, which is the largest amount Michigan's rate has been below the U.S. rate since June 2000.
- In August 2016, Michigan's unemployment rate was down 0.6 of a percentage point from a year ago. The August U.S. unemployment rate decreased 0.2 of a percentage point from a year ago. Monthly unemployment rates fluctuate in part due to statistical sampling errors and data revisions.

Michigan and U.S. Monthly Unemployment Rates January 2013 to August 2016



Source: Michigan Dept. of Technology, Management & Budget and Bureau of Labor Statistics, U.S. Dept. of Labor

- In August, the total number of people employed in Michigan decreased 7,000 to 4,588,000 persons while the labor force fell 5,000. The statewide total number of unemployed workers rose 2,000 to 216,000.
- United States employment totaled 151.6 million persons in August. The labor force totaled 159.5 million and there were 7.8 million unemployed in August 2016.

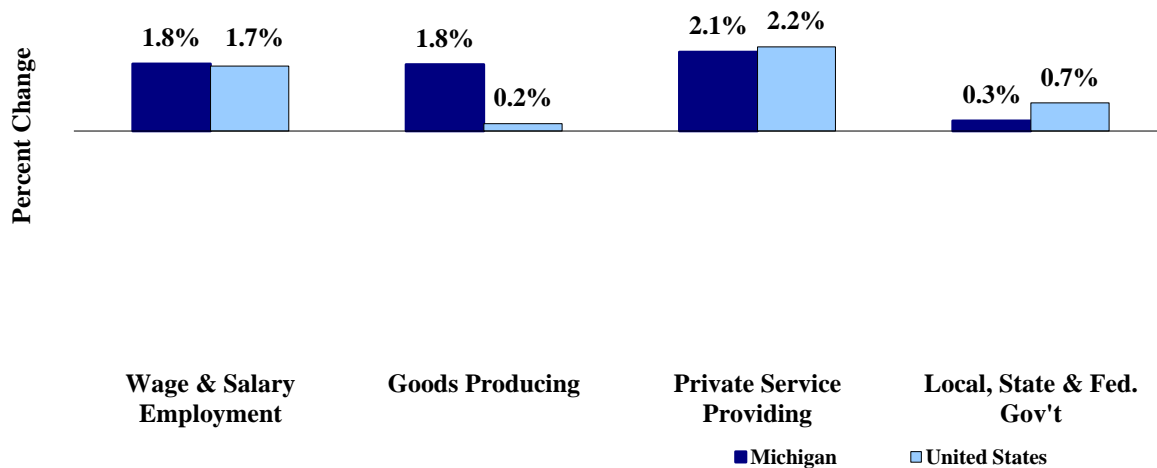
Employment by Place of Residence (in thousands)^(a)

| | 2015 Average | Jun 2016 | Jul 2016 | Aug 2016 | Change From | | | | |
|----------------------|-----------------|-------------|-------------|-------------|-------------|----------|-----------|-----------|--|
| | | | | | Prior Month | | Last Year | | |
| | | | | | Level | % | Level | % | |
| Michigan | | | | | | | | | |
| Labor Force | 4,751 | 4,838 | 4,809 | 4,804 | -5 | -0.1% | 63 | 1.3% | |
| Employed | 4,493 | 4,616 | 4,595 | 4,588 | -7 | -0.2% | 90 | 2.0% | |
| Unemployed | 258 | 222 | 214 | 216 | 2 | 0.9% | -28 | -11.5% | |
| Unemployment Rate | 5.4% | 4.6% | 4.5% | 4.5% | n.a. | 0.0% pts | n.a. | -0.6% pts | |
| United States | | | | | | | | | |
| Labor Force | 157,130 | 158,880 | 159,287 | 159,463 | 176 | 0.1% | 2,402 | 1.5% | |
| Employed | 148,834 | 151,097 | 151,517 | 151,614 | 97 | 0.1% | 2,571 | 1.7% | |
| Unemployed | 8,296 | 7,783 | 7,770 | 7,849 | 79 | 1.0% | -169 | -2.1% | |
| Unemployment Rate | 5.3% | 4.9% | 4.9% | 4.9% | n.a. | 0.0% pts | n.a. | -0.2% pts | |

Employment by Place of Work (Payroll)

- From August 2015 to August 2016, Michigan payroll employment increased 75,800 jobs (1.8 percent). State payroll employment fell by 16,400 jobs in August from July. Nationally, August 2016 payroll employment rose 2,447,000 (1.7 percent) from a year ago and was up 151,000 from July.

Payroll Employment Growth August 2015 to August 2016



Source: Bureau of Labor Statistics, Michigan Department of Technology, Management & Budget

- In the goods-producing sector, Michigan payroll employment increased 1.8 percent in August from a year ago while employment in the private service-providing sector increased 2.1 percent. From a year ago, August national payroll employment rose 0.2 percent in the goods-producing sector and increased 2.2 percent in the private service-providing sector. Government employment was up 0.3 percent from a year ago in Michigan. Nationwide, government employment was up 0.7 percent.
- Manufacturing weekly hours in Michigan were down 1.8 hours in August compared to last year.

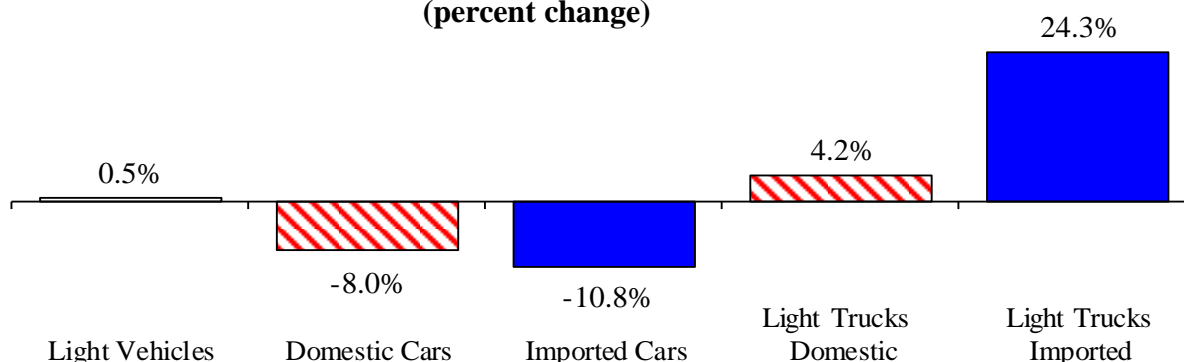
Wage and Salary (Payroll) Employment (in thousands)^(b)

| | Michigan | | | | United States | | | |
|----------------------------|-----------------|-------------|-------------|-------------------|-----------------|-------------|-------------|-------------------|
| | 2015 Average | Aug 2015 | Aug 2016 | Percent Change | 2015 Average | Aug 2015 | Aug 2016 | Percent Change |
| Wage & Salary Employment | 4,243.7 | 4,248.8 | 4,324.6 | 1.8% | 141,865 | 142,151 | 144,598 | 1.7% |
| Goods Producing | 742.9 | 742.2 | 755.3 | 1.8% | 19,584 | 19,562 | 19,600 | 0.2% |
| Manufacturing | 587.3 | 588.0 | 597.1 | 1.5% | 12,318 | 12,318 | 12,281 | -0.3% |
| Private Service Providing | 2,906.5 | 2,910.8 | 2,971.9 | 2.1% | 100,275 | 100,540 | 102,785 | 2.2% |
| Trade, Trans. & Utilities | 770.7 | 772.3 | 772.3 | 0.0% | 26,920 | 26,978 | 27,373 | 1.5% |
| Services | 1,872.0 | 1,875.0 | 1,922.8 | 2.5% | 62,480 | 62,659 | 64,313 | 2.6% |
| Local, State & Fed. Gov't | 594.3 | 595.8 | 597.4 | 0.3% | 22,007 | 22,049 | 22,213 | 0.7% |
| Manufacturing Weekly Hours | 44.2 | 44.1 | 42.3 | -1.8 hrs | 41.8 | 40.8 | 40.6 | -0.2 hrs |

Motor Vehicle Industry Sales

- August 2016 U.S. light vehicle sales were down 5.0 percent from July and were down 3.8 percent from August 2015. At 16.9 million units, August 2016 marks the 30th straight month that the light vehicle annualized sales rate exceeded 16.0 million units and only the fourth month out of the most recent 18 months that the sales rate did not exceed 17.0 million units.
- U.S. sales of domestic light vehicles decreased 4.4 percent between August 2015 and August 2016. Foreign sales were down 1.6 percent over the same period. As a result, the foreign share of U.S. light vehicle sales rose 0.5 percentage point to 22.4 percent in August 2016.
- Auto sales decreased 13.3 percent compared to last August, while light truck sales were up 3.4 percent from August 2015. As a result, August 2016 marked the fifth straight month in which the light truck share of total sales share exceeded 60.0 percent. Prior to the last five months, the light truck sales share exceeded 60.0 percent only once (July 2005). August 2016 heavy truck sales were down 29.0 percent from a year ago – marking the fourth straight monthly year-over-year double-digit decline.

Year-to-Date Total Light Vehicle Sales (Jan-Aug 2016) Up Only Slightly from Year Ago (Jan-Aug 2015) (percent change)



Motor Vehicle Sales Statistics

(Millions, unless otherwise specified)

| Motor Vehicle Sales ^(c) | 2015 | Jun | Jul | Aug | 3 Month | Change from | |
|------------------------------------|-------|-------|-------|-------|---------|-------------|--------|
| | Total | 2016 | 2016 | 2016 | Average | Level | % |
| Autos | 7.5 | 6.6 | 6.9 | 6.5 | 6.7 | (1.0) | -13.3% |
| Domestics | 5.6 | 4.9 | 5.1 | 4.9 | 5.0 | (0.7) | -12.8% |
| Imports | 1.9 | 1.7 | 1.7 | 1.6 | 1.7 | (0.3) | -14.8% |
| Import Share | 25.4% | 25.8% | 25.4% | 25.1% | 25.4% | -0.4% pts | |
| Light Trucks | 9.9 | 10.2 | 10.9 | 10.4 | 10.5 | 0.3 | 3.4% |
| Domestics | 8.1 | 8.0 | 8.7 | 8.2 | 8.3 | 0.1 | 1.5% |
| Imports | 1.8 | 2.1 | 2.2 | 2.1 | 2.2 | 0.2 | 11.6% |
| Import Share | 18.1% | 21.0% | 20.1% | 20.7% | 20.6% | 1.5% pts | |
| Total Light Vehicles | 17.4 | 16.8 | 17.8 | 16.9 | 17.2 | (0.7) | -3.8% |
| Heavy Trucks | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | (0.1) | -29.0% |
| Total Vehicles | 17.8 | 17.2 | 18.2 | 17.2 | 17.5 | (0.8) | -4.4% |

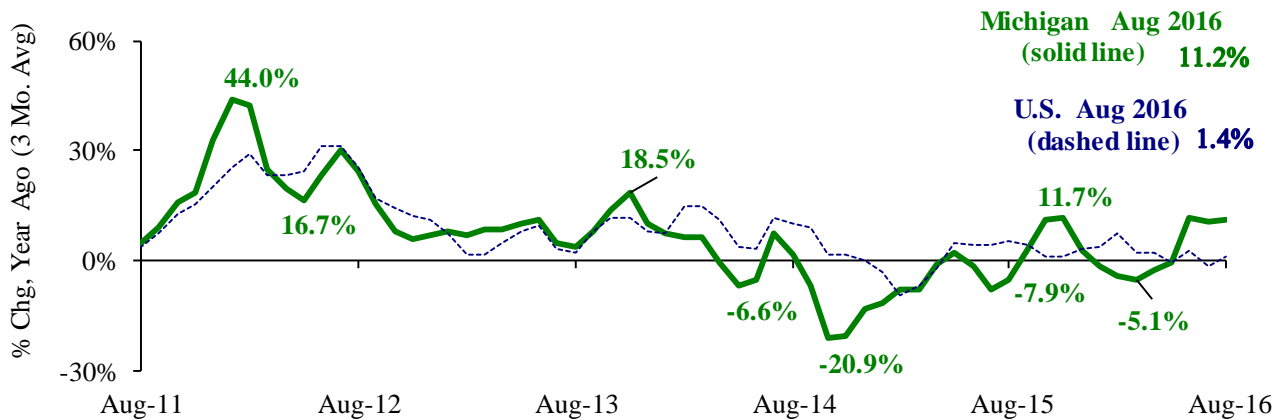
Retail Inventories, Motor Vehicle and Parts Dealers^(d) (billions of dollars)

| | 2015 | May-16 | Jun-16 | Jul-16 | 3 Month | Change from | |
|-----------------------|---------|---------|---------|---------|---------|-------------|------|
| | Average | May-16 | Jun-16 | Jul-16 | Average | Level | % |
| Inventories | \$190.4 | \$208.0 | \$209.7 | \$209.3 | \$209.0 | \$17.0 | 8.8% |
| Inventory/Sales Ratio | 2.10 | 2.27 | 2.28 | 2.23 | 2.26 | 0.12 | |

Motor Vehicle Industry Production

- At 213,188 units, August 2016 Michigan motor vehicle production was up 11.2 percent from August 2015. National production increased 12.0 percent from last August. The three-month average of vehicle production (June 2016-August 2016) was up 11.2 percent in Michigan and up 1.4 percent nationally, compared to a year ago.
- In August 2016, Michigan car production was up 7.5 percent from a year ago while State truck production rose 13.2 percent. Nationally, car production increased 7.4 percent while U.S. truck production was up 14.4 percent.
- Michigan’s share of national vehicle production fell 0.1 percentage point to 18.4 percent in August 2016 from the year-ago level. Michigan’s share of U.S. car production was unchanged at 18.4 percent. Michigan’s share of U.S truck production decreased 0.2 of a percentage point to 18.4 percent.

Michigan Motor Vehicle Production Trending Upward ^(e,f)



Motor Vehicle Production Statistics

(Thousands, unless otherwise specified)

| | 2015 Monthly Average | Jun 2016 | Jul 2016 | Aug 2016 | 3 Month Average | Change from Year Ago for the Month | |
|---|----------------------------|-------------|-------------|-------------|--------------------|--|-------|
| | | | | | | Level | % |
| U.S. Production ^(e) | | | | | | | |
| Autos | 355.8 | 389.6 | 269.4 | 386.3 | 348.4 | 26.6 | 7.4% |
| Trucks | 644.1 | 734.5 | 525.5 | 770.8 | 677.0 | 97.0 | 14.4% |
| Total | 1,000.0 | 1,124.1 | 794.9 | 1,157.1 | 1,025.4 | 123.6 | 12.0% |
| Michigan Production ^(f) | | | | | | | |
| Autos | 68.3 | 100.0 | 57.5 | 71.2 | 76.2 | 5.0 | 7.5% |
| Trucks | 125.6 | 149.6 | 107.2 | 142.0 | 132.9 | 16.5 | 13.2% |
| Total | 193.9 | 249.6 | 164.7 | 213.2 | 209.2 | 21.5 | 11.2% |
| Michigan as % of U.S. | 19.4% | 22.2% | 20.7% | 18.4% | 20.4% | -0.1% | pts |

Local Area Unemployment Rates Decline in 12 of Michigan’s 17 Local Areas (Not Seasonally Adjusted)

In August 2016, the unemployment rates in Michigan’s 17 labor market areas ranged from a low of 3.3 percent in the Grand Rapids-Wyoming Metropolitan Statistical Area (MSA) to a high of 6.0 percent in the Detroit-Warren-Dearborn MSA. The August 2016 median unemployment rate was 4.4 percent, which is down 0.2 of a percentage point from last August’s 4.6 percent median rate.

Compared to a year ago, the August 2016 unemployment rate fell in 12 of Michigan’s 17 labor market areas. The median rate decline was 0.3 of a percentage point. The Upper Peninsula region reported the largest rate decrease of 0.5 of a percentage point. The two labor market areas that reported an increase in their unemployment rates from last year (Ann Arbor MSA and Monroe MSA) each reported a 0.1 of a percentage point rise. Three areas reported no change in their unemployment rates compared with a year ago.

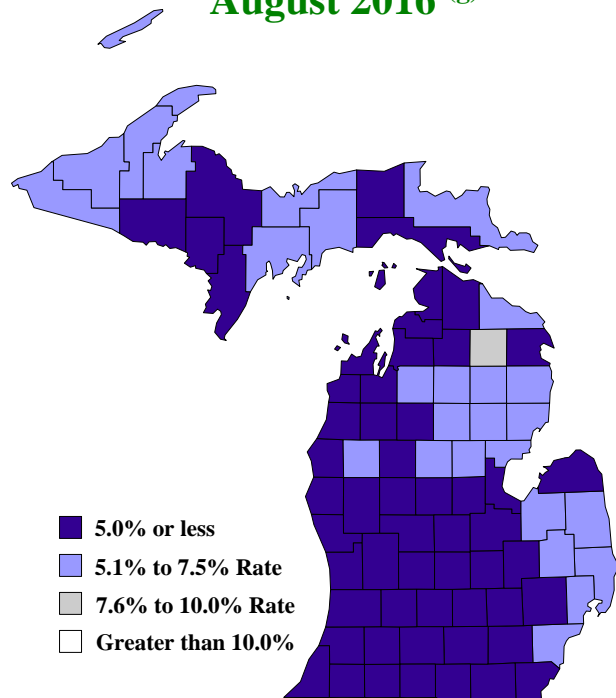
Between August 2015 and August 2016, household employment rose in 15 of Michigan’s 17 labor market areas and declined in two areas. The median employment increase was 1.8 percent. The Detroit-Warren-Dearborn MSA reported the largest year-over-year employment increase at 3.8 percent, followed by the Kalamazoo-Portage MSA with a 2.9 percent increase. The Jackson MSA reported the largest year-over-year employment decrease of 1.7 percent. The labor force rose in 15 labor market areas and fell in two areas. The Detroit-Warren-Dearborn MSA reported the largest percent increase in labor force at 3.4 percent, followed by the Ann Arbor MSA at 2.9 percent. The Jackson MSA recorded the largest percent decline in labor force at 1.8 percent.

Between August 2015 and August 2016, the unemployment rate fell in 65 of Michigan’s 83 counties, rose in 11 counties and was unchanged in seven counties. The median August 2016 rate decline was 0.3 of a percentage point. Schoolcraft County reported the largest unemployment rate decline at 2.4 percentage points, followed by Ontonagon County with a 1.4 percentage points decline. In August 2016, the unemployment rate was below 7.0 percent in 80 of Michigan’s 83 counties. In August 2015, 75 Michigan counties had an unemployment rate below 7.0 percent. In August 2016, no Michigan county had an unemployment rate above 8.0 percent.

Local Area Unemployment Rates^(g)

| <u>Local Area</u> | <u>Aug 2015 Rate</u> | <u>Jul 2016 Rate</u> | <u>Aug 2016 Rate</u> |
|-------------------------|----------------------|----------------------|----------------------|
| Michigan | 5.2% | 5.4% | 4.9% |
| Ann Arbor | 3.4% | 4.1% | 3.5% |
| Battle Creek | 4.5% | 5.0% | 4.4% |
| Bay City | 4.8% | 5.5% | 4.7% |
| Detroit-Warren-Dearborn | 6.4% | 6.1% | 6.0% |
| Flint | 5.3% | 6.0% | 5.0% |
| Grand Rapids-Wyoming | 3.4% | 3.9% | 3.3% |
| Jackson | 4.6% | 5.3% | 4.6% |
| Kalamazoo-Portage | 4.1% | 4.6% | 3.9% |
| Lansing-East Lansing | 4.0% | 4.4% | 3.8% |
| Midland | 4.1% | 4.7% | 4.1% |
| Monroe | 4.0% | 4.7% | 4.1% |
| Muskegon | 5.2% | 5.8% | 4.8% |
| Niles-Benton Harbor | 4.6% | 5.0% | 4.4% |
| Saginaw | 4.9% | 5.5% | 4.6% |
| Upper Peninsula | 5.6% | 6.2% | 5.1% |
| Northeast Lower Mich | 5.6% | 6.5% | 5.6% |
| Northwest Lower Mich. | 4.4% | 4.7% | 4.1% |

County Unemployment Rates August 2016^(g)

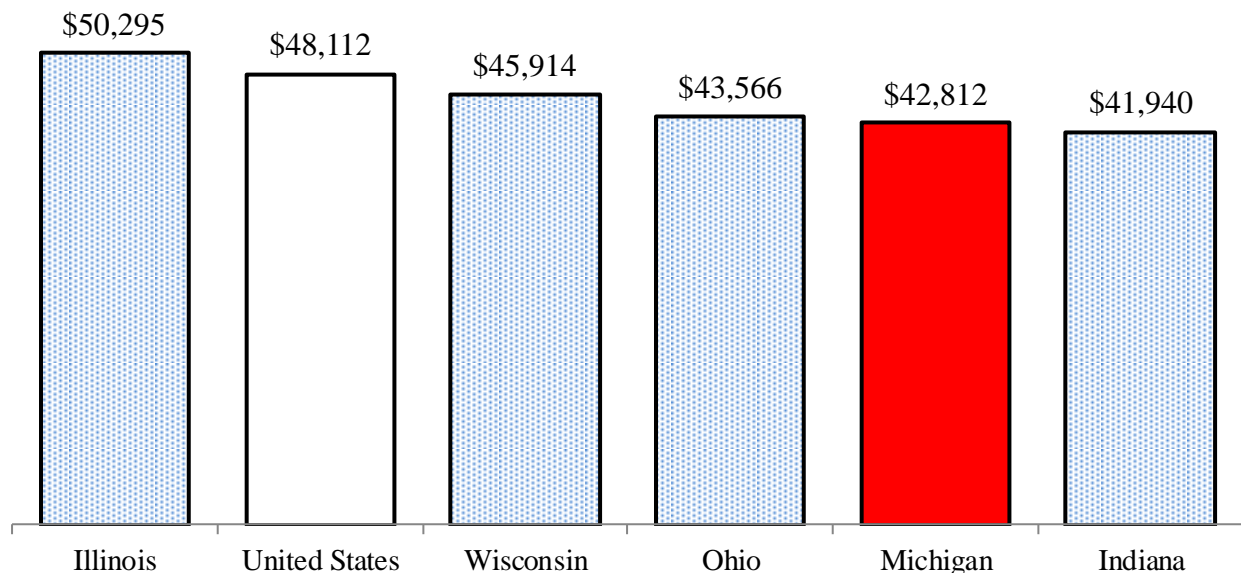


Michigan Personal Income Grows for the Sixth Straight Year

On September 28, 2016, the Bureau of Economic Analysis released revised annual state personal income estimates for 1998-2015. Below are highlights from the release:

- In 2015, nominal Michigan personal income rose 4.6 percent – marking the sixth straight year that the State’s personal income grew. Michigan’s 2015 personal income growth matched the State’s income growth in 2014. Nationally, U.S. personal income rose 4.5 percent in 2015 – down from 5.2 percent national personal income growth in 2014.
- With the Detroit CPI falling 1.4 percent in 2015, real (inflation adjusted) Michigan personal income rose 6.1 percent in 2015 after rising 3.5 percent in 2014. Nationally, real personal income grew 4.4 percent in 2015 after rising 3.5 percent in 2014.
- Between 2014 and 2015, Michigan income per person grew 4.6 percent – the fifth fastest 2014-2015 income per person growth among all states. Nationally, income per person rose 3.7 percent growth in 2015. With the Detroit CPI falling 1.4 percent, real Michigan income per person increased 6.0 percent in 2015. Nationally, real income per person rose 3.5 percent.
- Among the five Great Lakes states, Michigan income per person (\$42,812) ranked fourth in 2015, ahead of Indiana. Michigan has ranked fourth in the Great Lakes region in eight of the past ten years. The State ranked fifth in the region in 2009 and 2012. Michigan’s 2015 income per person placed 32nd among the 50 states. Ten years earlier, Michigan had ranked 26th in state income per person.
- In 2015, Michigan’s per person income as a percent of the national average rose slightly to 89.0 percent, the State’s highest percent of national income since 2005. Compared to ten years ago, 2015 Michigan per person income as a percent of the national average was down 2.4 percentage points.

Michigan 2015 Income Per Person Ranks 4th Among Great Lakes States



U.S. Economic Conditions

| | <u>May-16</u> | <u>Jun-16</u> | <u>Jul-16</u> | <u>Aug-16</u> | <u>Change from Year Ago</u> |
|---|---------------|---------------|---------------|---------------|---|
| KEY ECONOMIC INDICATORS | | | | | |
| Consumer Sentiment ^(h) | 94.7 | 93.5 | 90.0 | 89.8 | -2.1 points |
| ISM Manufacturing Index ⁽ⁱ⁾ | 51.3 | 53.2 | 52.6 | 49.4 | -1.6 points |
| ISM Non Manufacturing Index ⁽ⁱ⁾ | 52.9 | 56.5 | 55.5 | 51.4 | -6.9 points |
| | <u>2015.3</u> | <u>2015.4</u> | <u>2016.1</u> | <u>2016.2</u> | |
| Business Executives' Confidence ^(j) | 48.0 | 45.0 | 47.0 | 52.0 | -6.0 points |
| INFLATION ^(k) | | | | | |
| 1982-84 = 100 (CPI) | <u>May-16</u> | <u>Jun-16</u> | <u>Jul-16</u> | <u>Aug-16</u> | <u>Change from Year Ago</u> |
| Nov 2009 = 100 (PPI) | | | | | |
| U.S. Consumer Price Index | 240.2 | 241.0 | 240.6 | 240.9 | 1.1% |
| Detroit CPI | NA | 224.1 | NA | 223.9 | 1.7% |
| U.S. Producer Price Index | 110.1 | 110.9 | 110.6 | 110.5 | 0.0% |
| INTEREST RATES | | | | | |
| 90 Day T-Bill ^(l) | 0.27% | 0.27% | 0.30% | 0.30% | 0.23% points |
| Aaa Corporate Bonds ^(l) | 3.65% | 3.50% | 3.28% | 3.32% | -0.72% points |
| INDUSTRIAL PRODUCTION ^(l) | | | | | |
| | 103.7 | 104.3 | 104.9 | 104.4 | -1.1% |
| CAPACITY UTILIZATION ^(l) | | | | | |
| | 75.1% | 75.5% | 75.5% | 75.5% | -1.2% points |
| RETAIL SALES ^(d) | | | | | |
| | \$454.1 | \$457.4 | \$457.7 | \$456.3 | 1.9% |
| HOUSING STARTS and SALES | | | | | |
| (Millions Annual Rate) | <u>May-16</u> | <u>Jun-16</u> | <u>Jul-16</u> | <u>Aug-16</u> | <u>% Change From Year Ago</u> |
| Housing Starts ^(d) | 1.128 | 1.195 | 1.212 | 1.142 | 0.9% |
| Existing Home Sales ^(m) | 5.510 | 5.570 | 5.380 | 5.330 | 0.8% |
| DURABLE GOODS ORDERS ^(p) | | | | | |
| | \$228.8 | \$219.1 | \$227.0 | \$226.9 | -1.3% |
| PERSONAL INCOME ^(c) | | | | | |
| (Billions of Dollars) | <u>2015.3</u> | <u>2015.4</u> | <u>2016.1</u> | <u>2016.2</u> | <u>% Change From Year Ago</u> |
| Michigan | \$426.8 | \$433.1 | \$433.6 | \$438.5 | 3.8% |
| U.S. | \$15,564.5 | \$15,694.3 | \$15,740.8 | \$15,900.9 | 3.2% |
| GROSS DOMESTIC PRODUCT | | | | | |
| (Billions of Chained 2009 Dollars) ^(c) | <u>2015.3</u> | <u>2015.4</u> | <u>2016.1</u> | <u>2016.2</u> | <u>Annualized % Chg From Last Qtr</u> |
| | \$16,454.9 | \$16,490.7 | \$16,525.0 | \$16,583.1 | 1.4% |

SOURCES AND NOTES:

- (a) Seasonally adjusted. Sources: Bureau of Labor Statistics, U.S. Department of Labor and Michigan Department of Technology, Management and Budget.
- (b) Bureau of Labor Statistics, U.S. Department of Labor (BLS 790).
- (c) Seasonally adjusted annual rates. Source: Bureau of Economic Analysis, U.S. Department of Commerce.
- (d) Bureau of the Census, U.S. Department of Commerce
- (e) Automotive News.
- (f) Michigan Department of Treasury.
- (g) Michigan Department of Technology, Management and Budget.
- (h) University of Michigan Survey of Consumers.
- (i) Institute for Supply Management (ISM), formerly NAPM.
- (j) The Conference Board.
- (k) Bureau of Labor Statistics, U.S. Department of Labor.
- (l) Seasonally adjusted rates (except interest rates). Federal Reserve System Board of Governors. 2007 equals 100. Treasury bill rate (secondary market).
- (m) National Association of Realtors.